



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/809,349

03/26/2004

Jerome Asius

22114-00001-US1

7560

30678

7590

10/07/2009

CONNOLLY BOVE LODGE & HUTZ LLP

1875 EYE STREET, N.W.

SUITE 1100

WASHINGTON, DC 20006

EXAMINER

PREBILIC, PAUL B

ART UNIT

PAPER NUMBER

3774

MAIL DATE

DELIVERY MODE

10/07/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

1 RECORD OF ORAL HEARING

2  
3 UNITED STATES PATENT AND TRADEMARK OFFICE

4  
5  
6 BEFORE THE BOARD OF PATENT APPEALS  
7 AND INTERFERENCES

8  
9  
10 *Ex parte* JEROME ASIUS, HATEM FESSI, FRANCK GOUCHET,  
11 BENEDIC TE LEGLENNE and ELISABETH LAUGHIER-LAGLENNE

12  
13  
14 Appeal 2009-003445  
15 Application 10/809,349  
16 Technology Center 3700

17  
18  
19 Oral Hearing Held: September 15, 2009

20  
21  
22  
23 Before WILLIAM F. PATE, III, STEFAN STAICOVICI and KEN B.  
24 BARRETT, *Administrative Patent Judges*.

25  
26 ON BEHALF OF THE APPELLANT:

27  
28 BURTON A. AMERNICK, ESQUIRE  
29 Connolly, Bove, Lodge & Hutz, LLP  
30 1875 Eye Street, N.W.  
31 Suite 1100  
32 Washington, D.C. 20006

33  
34  
35 The above-entitled matter came on for hearing on Wednesday, September  
36 15, 2009, commencing at 10:20 a.m., at the U.S. Patent and Trademark  
37 Office, 600 Dulany Street, Alexandria, Virginia, before Christine L. Loeser,  
38 Notary Public.

PROCEEDINGS

1

2

3 JUDGE PATE: I would like you to introduce your guest.

4 MR. AMERNICK: With me is Ronald Borg, who is also a registered patent  
5 attorney who is an in-house counsel for Sanofi-Aventis, who happens to be  
6 the Assignee of this Application.

7 JUDGE PATE: We have had a chance to look at this case beforehand  
8 so we think we are up to speed on the technology and we would like to hear  
9 your arguments about patentability.

10 MR. AMERNICK: Okay. That's fine. As you are aware, the  
11 question relates to whether or not the claimed invention is obvious or  
12 nonobvious.

13 Two references are relied upon for most of the claims. The primary  
14 reference is a Sander patent. That's US patent 5,356,629, and then a patent  
15 to Supersaxo, US patent 5,470,852, which the Examiner relied upon for  
16 disclosure related to freeze-drying.

17 With respect to Sander, the primary reference, first of all, as clear  
18 from the Examiner's position, Sander does not disclose freeze drying.  
19 We point out that Sanders does not disclose a reconstitutable product that  
20 would form a hydrogel. Sander does not disclose a hydrogel, and Sander is  
21 not concerned with an injectable composition and does not specifically  
22 require microparticles.

23 All of these aspects of the present invention are very important for  
24 achieving the reconstitutable product that will provide an injectable  
25 composition that's used, and if you obviously saw through the specification  
26 for reparative plastic surgery used for injection into soft tissue.

1 Just to drop back one moment, this invention actually has resulted in a  
2 commercial product. The commercial product is certainly out by  
3 Sanofi-Aventis. It is under the name Sculptra and it was initially approved  
4 for treating for AIDS patients to replace fat facial tissue.

5 Now most recently, it has been approved for more generalized use and  
6 it has been used in Europe since about 2002.

7 Sander, getting back to Sander, relates to a moldable composition. All  
8 of the examples, all of the specific disclosure in Sander relates to a putty that  
9 can be implanted into, say, a surgical site or a wound site and then it's  
10 shaped or molded to a repair bone or large bone defect by using a surgical  
11 spatula.

12 So nowhere -- and how Sander gets to that, they have a matrix and a  
13 biocompatible material. That biocompatible material can either be  
14 bioresorbable or it can be a non-bioresorbable material.

15 To begin with, the putties disclosed in Sander are not gels. One of the  
16 definitions and the more usual definition of gel we presented in Exhibit 1  
17 from Hawley's Condensed Chemical Dictionary and, basically, it is a  
18 colloidal dispersion that provides a jelly-like consistency or structure.

19 The putties are not that and, in fact, in the parent patent, this is a  
20 revision of a prior application which was subsequently issued as a patent.  
21 There was extensive prosecution in that case and on somewhat similar  
22 issues, the Office did conclude that a putty was not the same thing as the  
23 definition of a gel and, of course, we are also talking about not just a gel but  
24 hydrogel and an injectable hydrogel.

1 JUDGE PATE: The Examiner points to column 2 in Sander where he  
2 says it is a semi-solid material and it says it could be a gel, paste, putty or  
3 clay.

4 MR. AMERNICK: What he talks about there, if we read that whole  
5 portion is that they are talking about the consistency of it, the flowability of  
6 it, but not necessarily all the other characteristics that come into play  
7 because they talk about it being, like you stated, a semi-solid, possessing the  
8 qualities of both a solid and a liquid, a highly viscous substance, but yet  
9 flowable to some extent such as gel, paste, putty or clay, which is capable of  
10 being molded or shaped.

11 So what they are really talking about is that one characteristic, that  
12 one property and certainly gels can have, as far as the viscosity aspect or  
13 flowability aspect, certainly can fill that particular requirement, but the other  
14 characteristics of a gel are not really referred to or related there.  
15 In fact, if you are looking at that whole sentence or even talking about clay,  
16 obviously Sander is not making a clay but they are looking for, again,  
17 something with the viscosity characteristics of a clay, paste, gel or putty, so  
18 they are kind of broadening that out.

19 So I don't think they are really talking about forming a gel or, more  
20 specifically, a hydrogel there.

21 JUDGE PATE: With the substances here disclosed, you could make a  
22 gel.

23 MR. AMERNICK: If you were able to select the specific materials  
24 and, again, I know the Examiner pointed to the fact that they do disclose  
25 cellulosic ethers but recognize, and this is pretty well known, that the  
26 cellulosic ethers are inclusive of a very large, huge range of compounds and

1 materials that might have a similar chemical name to them but differ vastly  
2 or can differ vastly with respect to many, many other properties of the ether,  
3 such as molecular weight, degree of cross-linking, solubility characteristics,  
4 viscosity characteristics, have they been -- has the cellulosic ether been  
5 substituted with something such as sodium.

6 All those things will dictate what types of characteristics it has, and  
7 just generally stating it, it is a little less than stating something as in, quote, a  
8 polymer, but in any event, it does include a vast, vast range of materials.

9 And I think more instructively, you should go back, look at the examples,  
10 and it's constantly speaking about putty, putty, putty, constantly speaking  
11 about something that has to be shapeable, moldable, with a surgical spatula.  
12 We are looking at something that is reconstitutable to become an injectable.  
13 Again, with respect to an injectable, I'm not quite certain why one would go  
14 or even whether you would go to an injectable when you are talking about  
15 an implant that you are going to shape to or mold to a bone defect.

16 Also, with respect to the freeze-drying aspect, again, looking at  
17 Sander, I don't think there would be, one, any reason to carry out any  
18 freeze-drying when you look at the method process by which Sander puts  
19 together their composition. They take the two powder materials which are  
20 the matrix and the biocompatible material, mix them together.

21 Again, they are in powdered, dry form, in order to get a uniform  
22 dispersion of the biocompatible material in the matrix and then right before  
23 use, they will add some type of fluid to get the type of consistency needed to  
24 achieve the putty and, again, to make it moldable and shapeable with the  
25 spatula.

1           Also, if you take a putty, for example, and even at that state, if you  
2 would freeze-dry it, basically you would probably form some type of lumpy  
3 material. You are not going to be able to then add back, say, a liquid, water,  
4 for example, and obtain a hydrogel.

5           To get a hydrogel, you are going to have to start with the hydrogel,  
6 then carry out the steps or stages of, say, the process of the drying, in this  
7 case, the freeze-drying and then when you add back the water, you go back  
8 to its more or less original stage or original state there.

9           And again, we feel that hydrogels are not inherent for the reasons we just  
10 spoke about.

11           Also, our claims require that we look at microparticles. The particle  
12 range in Sander is an extremely broad range. The preferred particles are  
13 much larger than microparticles and there is mention of particles which  
14 could be in the micron sizes but they are kind of as an afterthought.

15           And the size does not seem to be important anyway in Sander because  
16 of the fact, again, that they are dealing with something that's an implant,  
17 that's put in during a surgical procedure, not something that's injectable  
18 where something to be injectable, the particle size does become an important  
19 characteristic of the composition.

20           Unless you have any other questions ...

21           JUDGE PATE: Any questions, Judge Barrett?

22           JUDGE BARRETT: No.

23           JUDGE PATE: Judge Staicovici?

24           I have no more questions. We will take this case under advisement.

25           Thank you very much.

26           MR. AMERNICK: We thank you for your time.

1           (Whereupon, the proceeds, at 10:32, were concluded.)

2

3